

Amendments to the Specification:

Please replace paragraphs [0005], [0009], [0011], [0014], [0018] and [0020] with the following rewritten paragraphs:

[0005] According to a first aspect of the present invention, there is provided an apparatus for obtaining a cuff volumetric pulse wave, comprising a cuff adapted to be worn on a limb of a living subject so that a pressure pulsation is produced in the cuff, a pressure sensor which is connected to the cuff, ~~a cuff adapted to be worn on a limb of a living subject so that a pressure pulsation is produced in the cuff~~, and which detects, as an actual cuff volumetric pulse wave, a pressure oscillation transmitted thereto from the cuff; an inverse transfer function memory which stores an inverse transfer function corresponding to a transfer function between pressure pulsation as input and pressure oscillation as ~~output~~; output, and a cuff volumetric pulse wave determining means for determining ~~determining~~, ~~using the inverse transfer function stored by the inverse transfer function memory~~, a no-delay cuff volumetric pulse wave having substantially no delay of transmission, based on the actual cuff volumetric pulse wave detected by the pressure sensor using the inverse transfer function stored by the inverse transfer function memory.

[0009] According to a third aspect of the present invention, there is provided ~~an apparatus for use in a method of obtaining a cuff volumetric pulse wave, the apparatus comprising wave with an apparatus including a cuff adapted to be worn on a limb of a living subject so that a pressure pulsation is produced in the cuff~~, a pressure sensor which is connected to the cuff, ~~a cuff adapted to be worn on a limb of a living subject so that a pressure pulsation is produced in the cuff~~, and which detects, as an actual cuff volumetric pulse wave, a pressure oscillation transmitted thereto from the ~~cuff~~, cuff, an inverse transfer function memory which stores an inverse transfer function corresponding to a transfer function between pressure pulsation as input and pressure oscillation as ~~output~~; output, and a

cuff volumetric pulse wave ~~determining means for determining, using the inverse transfer function stored by the inverse transfer function memory,~~ determining a no-delay cuff volumetric pulse wave having substantially no delay of ~~transmission,~~ transmission based on the actual cuff volumetric pulse wave detected by the pressure ~~sensor,~~ sensor and the inverse transfer function stored by the inverse transfer function memory, the method comprising: ~~wherein the method includes~~ (a) a step of determining the inverse transfer function corresponding to the transfer function, and storing the determined inverse transfer function in the inverse transfer function memory, and (b) a step of determining, using the inverse transfer function stored by the inverse transfer function memory, the no-delay cuff volumetric pulse wave having substantially no delay of transmission, based on the actual cuff volumetric pulse wave detected by the pressure sensor.

[0011] According to a fourth aspect of the present invention, there is provided ~~an apparatus for use in a method of obtaining a cuff volumetric pulse wave, the apparatus comprising wave with an apparatus including a cuff adapted to be worn on a limb of a living subject so that a pressure pulsation is produced in the cuff,~~ a pressure sensor which is connected to the cuff, ~~a cuff adapted to be worn on a limb of a living subject so that a pressure pulsation is produced in the cuff,~~ and which detects, as an actual cuff volumetric pulse wave, a pressure oscillation transmitted thereto from the ~~cuff,~~ cuff, an inverse transfer function memory which stores an inverse transfer function corresponding to a transfer function between pressure pulsation as input and pressure oscillation as ~~output,~~ output, a cuff volumetric pulse wave determining means for ~~determining, using the inverse transfer function stored by the inverse transfer function memory,~~ determining a no-delay cuff volumetric pulse wave having substantially no delay of ~~transmission,~~ transmission based on the actual cuff volumetric pulse wave detected by the pressure sensor and the inverse transfer function stored by the inverse transfer function memory, and a pulse wave analyzing means for analyzing the

no-delay cuff volumetric pulse wave determined by the cuff volumetric pulse wave determining means, the method comprising: ~~wherein the method includes~~ (a) a step of determining the inverse transfer function corresponding to the transfer function, and storing the determined inverse transfer function in the inverse transfer function memory, (b) a step of determining, using the inverse transfer function stored by the inverse transfer function memory, the no-delay cuff volumetric pulse wave having substantially no delay of transmission, based on the actual cuff volumetric pulse wave detected by the pressure sensor, and (c) a step of analyzing the determined no-delay cuff volumetric pulse wave, and thereby determining at least one of a blood pressure, a pulse wave propagation velocity, an arteriosclerosis evaluation index, and an autonomic nerve evaluation value of the subject.

[0014] According to a fifth aspect of the present invention, there is provided an apparatus for obtaining a pressure pulse wave, comprising a cuff adapted to be worn on a limb of a living subject so as to press an artery of the limb, a pressure sensor which is connected to the cuff, ~~a cuff adapted to be worn on a limb of a living subject so as to press an artery of the limb,~~ and which detects, as a cuff volumetric pulse wave, a pressure oscillation transmitted thereto from the cuff; an inverse transfer function memory which stores an inverse transfer function corresponding to a transfer function between intra-arterial pressure as input and pressure oscillation as output; and —a pressure pulse wave determining means for ~~determining, using the inverse transfer function stored by the inverse transfer function memory,~~ determining a pressure pulse wave produced in the artery, based on the cuff volumetric pulse wave detected by the pressure ~~sensor,~~ sensor the inverse transfer function stored by the inverse transfer function memory.

[0018] According to a seventh aspect of the present invention, there is provided ~~an apparatus for use in a method of obtaining a pressure pulse wave, the apparatus comprising~~ an apparatus including a cuff adapted to be worn on a limb of a living

subject so as to press an artery of the limb, a pressure sensor which is connected to the cuff, a ~~cuff adapted to be worn on a limb of a living subject so as to press an artery of the limb,~~ and which detects, as a cuff volumetric pulse wave, a pressure oscillation transmitted thereto from the ~~cuff,~~ cuff, an inverse transfer function memory which stores an inverse transfer function corresponding to a transfer function between intra-artery pressure as input and pressure oscillation as ~~output,~~ output, and a pressure pulse wave determining means for ~~determining,~~ determining, ~~using the inverse transfer function stored by the inverse transfer function memory,~~ determining a pressure pulse wave produced in the artery, based on the cuff volumetric pulse wave detected by the pressure ~~sensor,~~ sensor and the inverse transfer function stored by the inverse transfer function memory, the method comprising: ~~wherein the method includes~~ (a) a step of determining the inverse transfer function corresponding to the transfer function, and storing the determined inverse transfer function in the inverse transfer function memory, and (b) a step of determining, using the inverse transfer function stored by the inverse transfer function memory, the pressure pulse wave produced in the artery, based on the cuff volumetric pulse wave detected by the pressure sensor.

[0020] According to an eighth aspect of the present invention, there is provided ~~an apparatus for use in a method of obtaining a pressure pulse wave,~~ the apparatus ~~comprising wave with an apparatus including a cuff adapted to be worn on a limb of a living subject so as to press an artery of the limb,~~ a pressure sensor which is connected to the cuff, a ~~cuff adapted to be worn on a limb of a living subject so as to press an artery of the limb,~~ and which detects, as a cuff volumetric pulse wave, a pressure oscillation transmitted thereto from the ~~cuff,~~ cuff, an inverse transfer function memory which stores an inverse transfer function corresponding to a transfer function between intra-arterial pressure as input and pressure oscillation as ~~output,~~ output, a pressure pulse wave determining means for ~~determining,~~ determining, ~~using the inverse transfer function stored by the inverse transfer function memory,~~ determining a

pressure pulse wave produced in the artery, based on the cuff volumetric pulse wave detected by the pressure sensor, and sensor and the inverse transfer function stored by the inverse transfer function memory, and a pulse wave analyzing means for analyzing the pressure pulse wave determined by the pressure pulse wave determining means, the method comprising: ~~wherein the method includes~~ (a) a step of determining the inverse transfer function corresponding to the transfer function, and storing the determined inverse transfer function in the inverse transfer function memory, (b) a step of determining, using the inverse transfer function stored by the inverse transfer function memory, the pressure pulse wave produced in the artery, based on the cuff volumetric pulse wave detected by the pressure sensor, and (c) a step of analyzing the determined pressure pulse wave, and thereby determining at least one of a blood pressure, a pulse wave propagation velocity, an arteriosclerosis evaluation index, and an autonomic nerve evaluation value of the subject.